

AMENDMENT TO THE CLAIMS

1. (Currently Amended) An apparatus for condensing and recycling stripper comprising:

a stripper condenser;

a first buffer tank;

a second buffer tank connecting to said stripper condenser by a first pipe and connecting to said first buffer tank by a second pipe;

a recycling device connecting to said first buffer tank by a fourth pipe;

a first pump mounted on said first pipe; a second pump mounted on said second pipe;

a concentration detector mounted in said stripper condenser; and

a controller electrically connected to said concentration detector, said a flow meter, and said a liquid level sensor for receiving the signals therefrom, and electrically connected to said first pump and said second pump for sending on-off messages to said second pump.

2. (Original) The apparatus as claimed in claim 1 further comprising a liquid waste disposing device connecting to said first pipe by a third pipe.

3. (Original) The apparatus as claimed in claim 2 further comprising a first valve mounted on said third pipe.

4. (Original) The apparatus as claimed in claim 3 further comprising a second valve mounted on said first pipe.

5. (Original) The apparatus as claimed in claim 4 further comprising a third valve mounted on said second pipe.

6. (Original) The apparatus as claimed in claim 5, wherein said first, second, and third valves are all electrically connecting to said controller.

7. (Original) The apparatus as claimed in claim 1 further comprising a flow meter mounted on said second pipe.

8. (Original) The apparatus as claimed in claim 7 further comprising at least one liquid level sensor mounted in said second buffer tank.

9. (Original) The apparatus as claimed in claim 8, wherein said controller further electrically connects to said flow meter and said liquid level sensor for receiving signals therefrom.

10. (Original) The apparatus as claimed in claim 9, wherein two liquid level sensors are respectively mounted in said stripper condenser and said second buffer tank, and both electrically connecting to said controller.

11. (Original) A method for increasing the uniformity of the concentration of stripper comprising:

(A) providing an apparatus for condensing and recycling stripper; wherein said apparatus comprises: a stripper condenser; a first buffer tank; a second buffer tank connecting to said stripper condenser by a first pipe and connecting to said first buffer tank by a second pipe; a liquid waste disposing device connecting to said first pipe by a third pipe; a recycling device connecting to said first buffer tank by a fourth pipe; a first pump mounted on said first pipe; a second pump mounted on said second pipe; a concentration detector mounted in said stripper condenser; a flow meter mounted on said second pipe for sensing the flow rate in said second pipe; at least one first liquid level sensor mounted in said second buffer tank for sensing the level of the liquid surface in said second buffer tank; a first valve mounted on said third pipe, a second valve mounted on said first pipe, a third valve mounted on said second valve, and a controller electrically connected to said concentration detector, said flow meter, and said liquid level sensor for receiving signals therefrom, and electrically connected to said first pump and said second pump for sending on-off messages to said second pump;

(B) collecting the condensed stripper from said stripper condenser;

(C) setting an alarmed water concentration of the stripper at said controller or concentration detector in said stripper condenser for driving an alarm;

(D) monitoring the water concentration of the stripper by said concentration detector, wherein said second valve is opened, said first valve is closed, and thereby said stripper flows into said second buffer tank if the water concentration of said stripper is lower than said alarmed water concentration; or said second valve is closed, said first valve is opened, and thereby said stripper flows into said liquid waste disposing device if the water concentration of said stripper is higher than said alarmed water concentration;

(E) calculating a flow rate in said controller according to the period of the on time of said first pump and the quantity of the total liquid transferred by said first pump, converting said flow rate to an open degree of said third valve, and sending said open degree to said third valve electrically; and

(F) regulating the flow rate through said third valve according to the signals sent from said controller, and thereby making the stripper in said second buffer tank flow into said first buffer tank.

12. (Original) The method as claimed in claim 11, further comprising a step (D'): providing a second liquid level sensor which is mounted on said stripper condenser and set with a first high liquid level and a first low liquid level, and turning on said first pump when the liquid level in said stripper condenser is above said first high liquid level, or turning off said first pump when the liquid level in said stripper condenser is below said first low liquid level.

13. (Original) The method as claimed in claim 11, further comprising a step (F') setting a second high liquid level, a second medium liquid level, and a second low liquid level in said first liquid level sensor mounted in said second buffer tank, and turning off said second pump when the liquid level in said second buffer tank is below said second low liquid level, or turning off said second valve and turning on said first valve when the liquid level in said second buffer tank is above said second high liquid level.

14. (Original) The method as claimed in claim 13, wherein the volume between said second high liquid level and said second low liquid level in said second buffer tank is larger than the volume between said first high liquid level and said first low liquid level in said stripper condenser.

15. (Original) The method as claimed in claim 11, wherein the flow rate of step (E) is calculated from the following equation (I):

$$\text{flow rate} = (V/t) \quad (I)$$

wherein V is the volume of stripper added into said second buffer tank when said first pump is running, and t is the average time calculated from the latest five time intervals between two starts of said first pump.

16. (Original) The method as claimed in claim 15, wherein the starting time of said first pump is not counted to said time of equation (I) when the concentration of the stripper in said condenser is higher than said alarmed concentration.